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ABSTRACT

This study examined outcomes for graduates of York University (Ontario) immediately and 2 years after graduation. An initial survey was conducted at the time students graduated from the university's faculties of Arts, Fine Arts, Pure and Applied Science, and the Schulich School of Business (SSB) in the fall of 1995 and the spring of 1996. Two years later a telephone survey of the 1,434 respondents to the original survey was conducted. Of graduates not continuing their education, most had made a successful transition to the labor market, with employment comparable to the national average. Very few graduates reported being unemployed and looking for work. There were some faculty-based differences: the greatest number of graduates who were still students came from the Faculty of Pure and Applied Science; SSB graduates reported the greatest number of full-time jobs; and the greatest number of self-employed graduates came from Fine Arts. No significant differences in current activities were found for ethno-racial differences or gender. Data and text provide detail on the following: current activities of graduates, number of months before getting first full-time job, monthly income, job satisfaction, relationship of jobs to education, threat of layoff, and assessment of the university experience. (DB)

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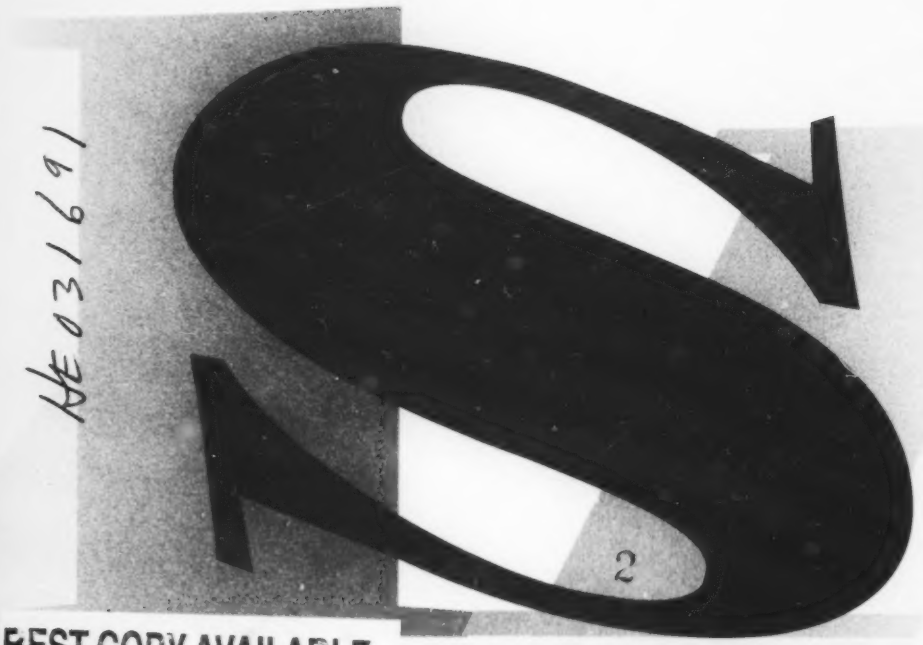
EXPERIENCES OF YORK GRADUATES - TWO YEARS LATER

J. PAUL GRAYSON



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EXPERIENCES OF YORK GRADUATES - TWO YEARS LATER

J. PAUL GRAYSON

Institute for Social Research
York University

October 1998

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Institute for Social Research
York University
4700 Keele Street
Toronto, Ontario, Canada M3J 1P3
Telephone: (416) 736-5061; Fax (416) 736-5749

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Other Publications on York Students

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Summary

Mail surveys were conducted with all graduates from the faculties of Arts, Fine Arts, Pure and Applied Science, and the Schulich School of Business (SSB) in the Fall of 1995 and the Spring of 1996. Two years later a telephone survey was carried out with respondents to the original survey.

Leaving aside a large minority who were still in school, two years after graduation, most graduates had made a successful transition to the labour market. There were, however, some faculty based differences. For example, the greatest number of graduates who were still students came from Pure and Applied Science; SSB graduates reported the greatest number of full-time jobs; and the greatest number of self-employed graduates came from Fine Arts.

Introduction

In Canada there is growing interest in the effects of field of study and academic achievement while in university on experiences after graduation. Indeed, starting in 1999, the Ontario government will require public disclosure of the jobs held by graduates of all universities in the province. Information on this topic has been collected at York University since 1995. In November of that year, a mail survey was carried out of all Fall graduates in the faculties of Arts, Fine Arts, Pure and Applied Science, and the Schulich School of Business (SSB). The same survey was administered to all graduates of the same faculties in June, 1996. The respondents to the combined surveys numbered 2,211 (response rate of 51%). Two years later, in November 1997, and June 1998, it was possible to locate and re-interview by telephone 1,434 of the respondents to the first surveys. The response rate for this second survey was 81%. A comparison of respondents in the first and second surveys indicated no statistically significant differences based on faculty, gender, family income, and cumulative grade point average (GPA). The focus of this report will be on the experiences of these students two years after graduation.

Theoretical Perspectives

When trying to make sense out of information on education, jobs, and salaries social scientists frequently refer to theories of 'socialization' or 'human capital', 'certification', and 'labour market segmentation'. The main idea of socialization theory is that as a result of education, students acquire skills and knowledge that they would not otherwise have. University graduates earn more money than high school graduates because employers value their skills and knowledge. For the same reason, graduates of some disciplines may get jobs more easily and make more money than graduates of other fields.

Certification theory is less flattering. It does not assume that university graduates necessarily have more skills or knowledge than non-graduates. Instead, independent of actual skills and knowledge, a university education confers a positive status on graduates that is valued by employers. In part it is for this reason that university graduates find it easier to get jobs and earn more than students with only high school diplomas. For the same reason graduates of some programs get jobs more easily and have higher incomes than graduates of other programs.

Labour market segmentation theory suggests that there is not one labour market in which all compete on the basis of their knowledge and skills. Instead, there are several distinct markets defined in terms of factors such as gender and ethno-racial origin. As a result, independent of skills and knowledge, groups like females and non-whites may find it difficult to get jobs. Moreover, if they do find jobs, they may receive relatively low pay.

These three perspectives have potential implications for how we interpret the experiences of York graduates. Findings that within disciplines graduates who get jobs are those with high marks and other skills valued by employers would be understandable from the point of view of socialization theory. On the other hand, a discovery that graduates of certain disciplines, despite having low marks and poor skill levels, have more luck with getting jobs than graduates with high marks and good skills from related disciplines, would be understandable from the perspective of certification theory. For these graduates, a positive status has been conferred by their major discipline. Last of all, study results indicating that getting a job has more to do with things like gender, ethno-racial origin, and class, would be interpretable from the position of labour market segmentation theory.

A totally different body of theory focuses on the ways in which undergraduate experiences contribute knowledge and skills that may help graduates get jobs. For example, 'student involvement' theory takes the position that in addition to the formal curriculum, informal academic and social involvement of students in university activities helps develop knowledge and skills. Moreover, many students believe that university friends will be of future help in furthering career ambitions (the research, however, qualifies this assumption). To the degree that knowledge and skills help graduates get jobs, there is a link between student involvement theory and theories discussed previously. In this report, the analysis will be shaped by the possibilities inherent in these perspectives.

Initial Experiences of Graduates

The surveys conducted in November 1995 and June 1996 centred on the experiences of students at the time of their graduation. It was found that 35% of graduates intended to continue their education in the following year, 9% were working part-time because they did not want a full-time job, 11% held part-time jobs because they could not find full-time employment, 26% had full-time jobs, 11% were unemployed and looking for full-time work, 1% were jobless and seeking part-time work, and 8% reported 'other' activities.

Who's Working?

An analysis of the characteristics of graduates who obtained full-time jobs upon graduation was based on insights obtained from 'human capital', 'certification', 'labour market segmentation', and 'student involvement' theories (Grayson, 1997a) as summarized above. Of the predictors suggested by these theories, it was found that family income was the most important: middle and high income students had a 152% and 298% greater chance respectively of having a full-time

job than students from low income families. Black students and those of Chinese origin were 48% and 54% less likely to be employed full-time than students of European descent. Students who attended 91% to 99% of their tutorials, labs, or studios were also 36% less likely than students who showed up 90% or less of the time to have full-time jobs. By comparison, students who worked more than 20 hours per week were 102% more likely to have a full-time job than those reporting 13 or fewer hours. Also, students who had a former employer to help them with the job search were 65% more likely than others to be employed full-time. Having basic computer skills gave a 32% edge to students in terms of full-time employment and graduates of social science and math/statistics departments had 56% and 60% disadvantages in having full-time jobs compared to graduates of business related departments. GPA had no effect on whether or not graduates had full-time jobs. On the basis of the foregoing information, it was concluded that in comparison to labour market segmentation theory, human capital, certification, and student involvement theories go only a short distance in explaining who gets full-time jobs upon graduation.

A second analysis based on theoretical concerns similar to those underlying the analysis above dealt with the characteristics of students who pursued further education upon graduation (Grayson, 1997b). In this analysis it was found that the best predictor of continuing education was graduation from a non-business related department. Grade point average had no statistically significant impact on the intent to obtain more education. One of the primary objectives of the current report is to see if the factors that explain the plans of graduates just after convocation also explain certain outcomes, such as the length of time it took to get a job.

Two Year Activities of Graduates

A number of findings of other Canadian studies of university graduates have been summarized in Table 1. As can be seen from rows 1 to 4, two years after graduation, the number of graduates with full-time jobs ranges from a low of 48% for McMaster in 1994 to a high of 82% for the National Graduates' Survey of 1996. Unfortunately, it is not always possible from the reports to determine if students who are continuing their education have been removed from the calculation of employment rates. As a result, we must treat the findings cautiously. This said, although only four studies are referenced, it seems clear that the ability of graduates to get jobs is a function of the time period in which graduation occurs and local labour market conditions. Row 5 of Table 1 also shows that we can expect variations by field of study prior to graduation.

Current Activities

From the information in the 'total' column of Table 2 (conditions for chi-square are not met), we see that two years after graduation 50.6% of York graduates report working full-time; however, if we remove the 26.9% of the graduates who are still students and the 2.9% reporting 'other' activities from the calculations, the number working full-time increases to 72.0%. Leaving current students out, the number of graduates working part-time by choice increases to 6.8%. Thus, 78.8% (72.0% + 6.8%) of graduates have either full-time jobs or are working part-time by choice. If the number of students working part-time by necessity (8.8% when current students are removed) is also added, the number of York graduates who are employed increases to 87.6% . When (after the removal of students) the 8.5% of graduates who are self-employed are added the employment rate increases to 96.1%. This figure is slightly higher than the national average of 82% reported in row 4 of Table 1.

Table 1: Select Findings of Surveys of Canadian Graduates Two Years Later

Finding	Survey	Reference
1. In 1992, 73% of 1990 bachelors graduates had full-time jobs.	National Graduates' Survey	Lapierre and Little, 1996
2. In 1994, 48% of the 1992 graduates of McMaster had full-time jobs.	Survey of McMaster Graduates	McMaster University
3. In 1995, 66% of British Columbia's 1993 bachelors' graduates were working full-time.	Survey of B.C. Graduates	Presidents' Council of British Columbia (BCU)
4. 82% of the class of 1995 reported in 1997 that they were working.	National Graduates' Survey	Daily, 13/03/1998
5. In 1992, unemployment rates were lowest for 1990 business (8%), and highest for social science (12%) graduates.	National Graduates' Survey	Lapierre and Little, 1996
6. Gender did not affect how quickly 1990 graduates found jobs.	National Graduates' Survey	Lapierre and Little, 1996
7. The average duration of unemployment for 1990 graduates with bachelors degrees was 5.4 months.	National Graduates' Survey	Lapierre and Little, 1996
8. In 1992, the average earnings of 1990 bachelors graduates was $32,000.	National Graduates' Survey	Lapierre and Little, 1996
9. In the short run, engineering and math and science graduates earn the most. In the long run, they earn less than non science and non engineering graduates.	Several National Graduates' Surveys	Finnie, 1993
10. Two years after graduation, approximately 45% of the 1992 graduates of McMaster were highly satisfied with their jobs.	Survey of McMaster Graduates	McMaster University

11. In 1995, 90% of the 1993 graduates of British Columbia's universities who had full-time jobs stated that they were very or somewhat satisfied with their jobs.	Survey of B.C. Graduates.	Presidents Council of British Columbia (BCU)
12. In 1992, 57% of 1990 bachelors graduates said that their job was directly related to their field of study.	National Graduates' Survey	Lapierre and Little, 1996
13. The match between jobs and education is closest for engineering and least close for social sciences.	Several National Graduates' Surveys	Finnie, 1993
14. Two years after graduation, the 1993 graduates of British Columbia's universities said that their first job was somewhat or very related to their education.	Survey of B.C. Graduates	Presidents' Council of British Columbia (BCU)
15. Over time, there is a general movement of graduates into jobs related to their fields of study.	Several National Graduates' Surveys	Finnie, 1993

Table 2 also shows that current activities vary by faculty of enrolment prior to graduation. Greatest full-time employment rates (79.6%) are reported by former SSB students. The lowest rates of employment (40.6%) are reported by Fine Arts graduates, followed closely by Science graduates (42.6%). The number of Arts graduates who have full-time jobs is 51.0% .

While particularly the number of Fine Arts students who are employed full-time may seem low, Table 3 shows that a large percentage, 19.8%, are self-employed. By comparison, the number of self-employed graduates from other faculties is rather low. Similarly, although relatively few Science graduates say that they have full-time jobs, a large number, 39.6%, are still students. Moreover, if unemployment rather than employment rates are examined, it is clear that only 2.5% of all York graduates report this status and there is very little difference in unemployment rates from one faculty to the next.

The extent to which there are differences in the current activities of York graduates that are based on sex are found in Table 3. Although chi-square for the table is statistically significant, differences are minor. For example, 51.8% and 48.2% of males and females respectively report full-time jobs. The magnitude of differences in other categories are similarly small. In essence, two years after graduation, males and females are alike in terms of their activities.

Although the conditions for chi-square are not met in Table 4, it is clear that the current activities of graduates vary by ethno-racial origin. For example, the greatest number of self-employed individuals, 9.7%, are found among graduates of South Asian origin. By comparison, only 1.4% of Chinese origin students say that they are self-employed. When it comes to other forms of employment, however, 66.2% of students of Chinese background report full-time jobs. Only 49.3% of students of European origin also have full-time jobs. Relatively few graduates of Chinese origin, 19.7%, say that they are students compared to

Table 2: Current Activities Two Years After Graduation

			Faculty Within York University					
			Business	Arts	Fine Arts	Science	Unknown	Total
Current Activity	Self Employed	Count		59	19	6	1	85
		%		5.1%	19.8%	5.9%	4.3%	6.0%
	Working FT	Count	39	588	39	43	11	720
		%	79.6%	51.0%	40.6%	42.6%	47.8%	50.6%
	Working PT by Choice	Count	1	57	4	5	1	68
		%	2.0%	4.9%	4.2%	5.0%	4.3%	4.8%
	Working PT by Necessity	Count	1	75	7	2	3	88
		%	2.0%	6.5%	7.3%	2.0%	13.0%	6.2%
	Unemployed Looking FT	Count		32	2	2		36
		%		2.8%	2.1%	2.0%		2.5%
	Unemployed Looking PT	Count		2				2
		%		2%				1%
	Student	Count	5	312	18	40	7	382
		%	10.2%	27.1%	18.8%	39.6%	30.4%	26.9%
	Other	Count	3	28	7	3		41
		%	6.1%	2.4%	7.3%	3.0%		2.9%
Total		Count	49	1153	96	101	23	1422
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3: Activity Two Years After Graduation by Sex

			Respondent's Sex		
			Male	Female	Group Total
Current Activity	Self Employed	Count	44	41	85
		%	51.8%	48.2%	100.0%
	Working FT	Count	228	492	720
		%	31.7%	68.3%	100.0%
	Working PT by Choice	Count	13	55	68
		%	19.1%	80.9%	100.0%
	Working PT by Necessity	Count	21	67	88
		%	23.9%	76.1%	100.0%
	Unemployed Looking FT	Count	15	21	36
		%	41.7%	58.3%	100.0%
	Unemployed Looking PT	Count	1	1	2
		%	50.0%	50.0%	100.0%
	Student	Count	133	249	382
		%	34.8%	65.2%	100.0%
	Other	Count	13	28	41
		%	31.7%	68.3%	100.0%
Group Total		Count	468	954	1422
		Row %	32.9%	67.1%	100.0%

Table 4: Activity Two Years After Graduation by Ethno-Racial Origin

			RACE					
			Black	South Asian	Chinese	Other Non-European	European	Total
Current Activity	Self Employed	Count	3	7	1	7	65	83
		%	4.2%	9.7%	1.4%	4.9%	6.4%	6.0%
	Working FT	Count	33	37	47	79	504	700
		%	45.8%	51.4%	66.2%	54.9%	49.3%	50.7%
	Working PT by Choice	Count	4		4	4	53	65
		%	5.6%		5.6%	2.8%	5.2%	4.7%
	Working PT by Necessity	Count	6	2		8	68	84
		%	8.3%	2.8%		5.6%	6.7%	6.1%
	Unemployed Looking FT	Count		3	3	5	25	36
		%		4.2%	4.2%	3.5%	2.4%	2.6%
	Unemployed Looking PT	Count				1	1	2
		%				.7%	.1%	.1%
	Student	Count	23	20	14	36	278	371
		%	31.9%	27.8%	19.7%	25.0%	27.2%	26.9%
	Other	Count	3	3	2	4	28	40
		%	4.2%	4.2%	2.8%	2.8%	2.7%	2.9%
Total		Count	72	72	71	144	1022	1381
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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31.9% of Blacks. If the figures for unemployment are examined, it is clear that few students ,0.1%, of all origins find themselves in this situation. (The lower unemployment rates found in this table as compared to Table 3 can be explained by missing data for ethno-racial origin.) Despite these and other differences in the table, it cannot be argued that some ethno-racial groups are worse off than others in terms of current activities.

Getting Jobs

The amount of time it took the graduates to get their first full- time job after graduation is summarized in Table 5. Overall, excluding those still in school, it took graduates 3.4 months to get their first full-time job. Although there are fluctuations from one faculty to the next, between the sexes, and among different ethno-racial groups, differences are not statistically significant. Sex also had no impact on the amount of time to find jobs in the National Graduates' Survey (see row 6, Table 1).

On average, graduates report 1.45 jobs since graduation. As seen from Table 6, differences based on faculty, sex, and ethno-racial origin are slight. Moreover, differences are not statistically significant.

Monthly Income

Information on the monthly income of graduates of different faculties can be found in Table 7. As seen from the total column, a plurality (46.9%) of all graduates earn between $2,001 and $3,000 per month. Minorities report $1,000 or less (10.1%) and $4,000 or more (6.3%) in monthly earnings.

If faculty differences are examined, the overall impression left by the table is that SSB graduates report the highest, and Fine Arts graduates, the lowest incomes. For example, while no SSB graduates report earnings of $1,000 or less

Table 5: Months To Get First FT Job After Graduation

		Months Getting First FT Job		
		Mean	Count	Std Deviation
Faculty Within York University	Unknown	4.50	18	6.99
	Business	2.69	47	5.21
	Arts	3.40	886	5.63
	FineArts	3.90	72	5.64
	Science	3.57	78	5.55
Group Total		3.43	1070	5.62
Sex	Male	2.99	368	5.12
	Female	3.69	733	5.87
Group Total		3.43	1101	5.61
Ethno-Racial Origin	Black	2.12	51	3.40
	South Asian	2.63	57	5.18
	Chinese	4.42	60	5.73
	Other Non-European	4.07	113	5.72
	European	3.39	789	5.72

Table 6: Number of Jobs Since Graduation by Faculty, Sex, and Ethno-Racial Origin

		Number Jobs Since Graduation		
		Mean	Count	Std Deviation
Faculty Within York University	Unknown	1.44	18	.62
	Business	1.32	47	.63
	Arts	1.45	886	.71
	FineArts	1.67	72	1.81
	Science	1.32	78	.61
Group Total		1.46	1070	.83
Sex	Male	1.49	368	1.05
	Female	1.43	733	.68
Group Total		1.45	1101	.82
Ethno-Racial Origin	Black	1.39	51	.67
	South Asian	1.35	57	.81
	Chinese	1.30	60	.59
	Other Non-European	1.42	113	.66
	European	1.49	789	.87

Table 7: Monthly Income by Faculty

			Faculty Within York University					
			Business	Arts	Fine Arts	Science	Unknown	Total
Monthly Income	LE $1000	Count		83	12	4	3	102
		%		10.0%	19.7%	6.8%	15.0%	10.1%
	$1001 to $2000	Count	1	218	17	9	4	249
		%	2.6%	26.1%	27.9%	15.3%	20.0%	24.6%
	$2001 to $3000	Count	20	389	25	29	12	475
		%	51.3%	46.6%	41.0%	49.2%	60.0%	46.9%
	$3001 to $4000	Count	11	93	5	13	1	123
		%	28.2%	11.2%	8.2%	22.0%	5.0%	12.1%
	GT $4000	Count	7	51	2	4		64
		%	17.9%	6.1%	3.3%	6.8%		6.3%
Total		Count	39	834	61	59	20	1013
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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Table 8: Monthly Income by Sex

			Student's Sex		
			Female	Male	Total
Monthly Income	LE $1000	Count	78	21	99
		%	11.8%	6.5%	10.0%
	$1001 to $2000	Count	181	64	245
		%	26.9%	19.9%	24.7%
	$2001 to $3000	Count	317	146	463
		%	47.2%	45.5%	46.6%
	$3001 to $4000	Count	59	63	122
		%	8.8%	19.6%	12.3%
	GT $4000	Count	37	27	64
		%	5.5%	8.4%	6.4%
Total		Count	672	321	993
		%	100.0%	100.0%	100.0%

Table 9: Monthly Income by Ethno-Racial Origin

			Ethno-Racial Origin					
			Black	South Asian	Chinese	Other Non-European	European	Total
Monthly Income	LE $1000	Count	6	4	5	12	71	98
		%	11.8%	7.3%	8.9%	12.0%	9.9%	10.0%
	$1001 to $2000	Count	13	6	17	24	182	242
		%	25.5%	10.9%	30.4%	24.0%	25.3%	24.6%
	$2001 to $3000	Count	24	29	22	47	337	459
		%	47.1%	52.7%	39.3%	47.0%	46.8%	46.7%
	$3001 to $4000	Count	3	9	8	12	87	119
		%	5.9%	16.4%	14.3%	12.0%	12.1%	12.1%
	GT $4000	Count	5	7	4	5	43	64
		%	9.8%	12.7%	7.1%	5.0%	6.0%	6.5%
Total		Count	51	55	56	100	720	982
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10: Job Satisfaction by Faculty

			Faculty Within York University					
			Business	Arts	FineArts	Science	Unknown	Total
Satisfaction With Your Main Job	Very Satisfied	Count	17	356	30	29	7	439
		%	40.5%	38.0%	39.5%	46.0%	33.3%	38.5%
	Somewhat Satisfied	Count	18	337	32	24	8	419
		%	42.9%	35.9%	42.1%	38.1%	38.1%	36.8%
	Neither	Count	1	95	7	5	1	109
		%	2.4%	10.1%	9.2%	7.9%	4.8%	9.6%
	Somewhat Dissatisfied	Count	5	93	4	4	4	110
		%	11.9%	9.9%	5.3%	6.3%	19.0%	9.6%
	Very Dissatisfied	Count	1	57	3	1	1	63
		%	2.4%	6.1%	3.9%	1.6%	4.8%	5.5%
Total		Count	42	938	76	63	21	1140
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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per month, 19.7% of Fine Arts students report this income level. At the other extreme, 17.9% of SSB graduates say that they earn $4,000 or more per month while a similar amount is earned by only 3.3% of Fine Arts graduates. Unfortunately, the conditions for chi-square are not met in Table 7.

Data presented in Table 8 show that female graduates are slightly disadvantaged in terms of monthly income when compared to their male counterparts. While 11.6% of females say that they earn $1,000 or less per month, only 6.5% of male graduates make this minimal amount. Conversely, whereas 8.4% of males make $4,000 or more per month, only 5.5% of females make a similar amount. These differences are statistically significant. Table 1, rows 8 and 9, suggests that allowing for inflation the earnings of York graduates are comparable to the national norm.

Finally, although Table 9 indicates some differences in earnings that are related to ethno-racial origin, comparisons do not favour European origin graduates over others. For example, among graduates of European descent, only 6.0% make more than $4,000. By comparison, 12.7% of South Asian graduates are in the high income group. Overall differences, however, are not statistically significant.

Job Satisfaction

In terms of satisfaction with their jobs, the total column in Table 10 shows that the vast majority of graduates are either very, or somewhat satisfied with their main jobs (38.5% and 36.8% respectively). Moreover, the differences that exist among faculties are not statistically significant. Relevant findings of other Canadian studies are found in rows 10 and 11 of Table 1. Sex based differences as reported in Table 11 also are not statistically significant.

Table 11: Job Satisfaction by Sex

			Student's Sex		
			Female	Male	Total
Satisfaction With Your Main Job	Very Satisfied	Count	292	140	432
		%	38.4%	39.0%	38.6%
	Somewhat Satisfied	Count	279	132	411
		%	36.7%	36.8%	36.7%
	Neither	Count	79	29	108
		%	10.4%	8.1%	9.7%
	Somewhat Dissatisfied	Count	67	39	106
		%	8.8%	10.9%	9.5%
	Very Dissatisfied	Count	43	19	62
		%	5.7%	5.3%	5.5%
Total		Count	760	359	1119
		%	100.0%	100.0%	100.0%

Table 12: Job Satisfaction by Ethno-Racial Origin

			Ethno-Racial Origin					
			Black	South Asian	Chinese	Other Non-European	European	Total
Satisfaction With Your Main Job	Very Satisfied	Count	14	26	13	42	331	426
		%	25.0%	45.6%	21.7%	36.8%	40.5%	38.6%
	Somewhat Satisfied	Count	23	17	26	35	306	407
		%	41.1%	29.8%	43.3%	30.7%	37.5%	36.9%
	Neither	Count	6	8	8	18	67	107
		%	10.7%	14.0%	13.3%	15.8%	8.2%	9.7%
	Somewhat Dissatisfied	Count	6	2	12	9	74	103
		%	10.7%	3.5%	20.0%	7.9%	9.1%	9.3%
	Very Dissatisfied	Count	7	4	1	10	39	61
		%	12.5%	7.0%	1.7%	8.8%	4.8%	5.5%
Total		Count	56	57	60	114	817	1104
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 13: Relation of Job to Education by Faculty

			Faculty Within York University					
			Business	Arts	FineArts	Science	Unknown	Total
Job Related To Undergraduate Education	Closely Related	Count	25	204	44	36	1	310
		%	59.5%	21.7%	57.9%	56.3%	4.8%	27.1%
	Somewhat Related	Count	14	294	16	15	4	343
		%	33.3%	31.2%	21.1%	23.4%	19.0%	30.0%
	Not At All Related	Count	3	444	16	13	16	492
		%	7.1%	47.1%	21.1%	20.3%	76.2%	43.0%
Total		Count	42	942	76	64	21	1145
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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Table 14: Relation of Job to Education by Sex

			Student's Sex		
			Female	Male	Total
Job Related To Undergraduate Education	Closely Related	Count	213	96	309
		%	28.0%	26.5%	27.5%
	Somewhat Related	Count	235	104	339
		%	30.8%	28.7%	30.2%
	Not At All Related	Count	314	162	476
		%	41.2%	44.8%	42.3%
Total		Count	762	362	1124
		%	100.0%	100.0%	100.0%

Table 15: Relation of Job to Education by Ethno-Racial Origin

			Ethno-Racial Origin					
			Black	South Asian	Chinese	Other Non-European	European	Total
Job Related To Undergraduate Education	Closely Related	Count	16	17	12	27	232	304
		%	28.6%	29.3%	20.0%	23.5%	28.3%	27.4%
	Somewhat Related	Count	19	13	23	30	251	336
		%	33.9%	22.4%	38.3%	26.1%	30.6%	30.3%
	Not At All Related	Count	21	28	25	58	337	469
		%	37.5%	48.3%	41.7%	50.4%	41.1%	42.3%
Total		Count	56	58	60	115	820	1109
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 16: Likelihood of Layoff by Faculty

			Faculty Within York University					
			Business	Arts	Fine Arts	Science	Unknown	Total
Likelihood of Layoff	Very Unlikely	Count	34	609	46	45	13	747
		%	81.0%	64.9%	60.5%	70.3%	61.9%	65.5%
	Somewhat Unlikely	Count	3	188	13	11	4	219
		%	7.1%	20.0%	17.1%	17.2%	19.0%	19.2%
	Don't Know	Count		20	7	1		28
		%		2.1%	9.2%	1.6%		2.5%
	Somewhat Likely	Count	5	61	4	3	3	76
		%	11.9%	6.5%	5.3%	4.7%	14.3%	6.7%
	Very Likely	Count		60	6	4	1	71
		%		6.4%	7.9%	6.3%	4.8%	6.2%
Total		Count	42	938	76	64	21	1141
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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Differences in job satisfaction are statistically significant if examined in connection with ethno-racial origin. Table 12 shows that graduates of South Asian origin (45.6%) are more satisfied with their jobs than, say, graduates of Chinese (21.7%) descent. Conversely, Black graduates (12.5%) are more dissatisfied with their jobs than those of Chinese background (1.7%).

Relationship of Jobs to Education

Information on other Canadian studies relevant to a discussion of the relationship between jobs and education can be found in Table 1, rows 12 to 15. When it comes to graduates' assessments of the relation between their jobs and their education in the current study, Table 13 indicates that 27.1% feel that the two are closely related, 30.0% think that there is some relationship, and 43.0% believe that there is no connection between their job and their education. There are, however, considerable differences between Arts graduates and the graduates of other faculties. For example, while only 21.7% of Arts graduates report a close relationship between their education and jobs, the figures for graduates of other faculties are far higher - 59.5% for SSB graduates, for example. Moreover, faculty based differences are statistically significant.

By comparison, data presented in Table 14 show that differences based on sex are small and not statistically significant. The same is true for differences based on ethno-racial origin as outlined in Table 15.

Threat of Layoff

The information presented in Table 16 shows that in general graduates are fairly secure in their current jobs. In fact, 65.5% and 19.2% say that it is very or somewhat unlikely respectively that in the next year they will be laid off. Despite the fact that the conditions for chi-square are not met in the table, it seems that SSB graduates are most secure in their jobs: 81.0% say that it is very

Table 17: Likelihood of Layoff by Sex

			Student's Sex		
			Female	Male	Total
Likelihood of Layoff	Very Unlikely	Count	500	234	734
		%	65.8%	64.8%	65.5%
	Somewhat Unlikely	Count	147	68	215
		%	19.4%	18.8%	19.2%
	Don't Know	Count	20	8	28
		%	2.6%	2.2%	2.5%
	Somewhat Likely	Count	49	24	73
		%	6.5%	6.6%	6.5%
	Very Likely	Count	43	27	70
		%	5.7%	7.5%	6.3%
Total		Count	759	361	1120
		%	100.0%	100.0%	100.0%

Table 18: Likelihood of Layoff by Ethno-Racial Origin

			Ethno-Racial Origin					
			Black	South Asian	Chinese	Other Non-European	European	Total
Likelihood of Layoff	Very Unlikely	Count	25	42	43	83	533	726
		%	44.6%	72.4%	71.7%	72.2%	65.3%	65.7%
	Somewhat Unlikely	Count	16	12	13	17	153	211
		%	28.6%	20.7%	21.7%	14.8%	18.8%	19.1%
	DK	Count	3			3	22	28
		%	5.4%			2.6%	2.7%	2.5%
	Somewhat Likely	Count	6	1	3	4	56	70
		%	10.7%	1.7%	5.0%	3.5%	6.9%	6.3%
	Very Likely	Count	6	3	1	8	52	70
		%	10.7%	5.2%	1.7%	7.0%	6.4%	6.3%
Total		Count	56	58	60	115	816	1105
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 19: Satisfaction with Academic Program at York by Faculty

			Faculty Within York University					
			Business	Arts	FineArts	Science	Unknown	Total
Satisfaction With Academic Program At York	Very Satisfied	Count	13	283	24	21	2	343
		%	31.0%	28.8%	31.2%	30.4%	9.1%	28.8%
	Somewhat Satisfied	Count	20	484	38	36	9	587
		%	47.6%	49.3%	49.4%	52.2%	40.9%	49.3%
	Neither	Count	4	103	2	6	4	119
		%	9.5%	10.5%	2.6%	8.7%	18.2%	10.0%
	Somewhat Dissatisfied	Count	5	91	9	6	7	118
		%	11.9%	9.3%	11.7%	8.7%	31.8%	9.9%
	Very Dissatisfied	Count		20	4			24
		%		2.0%	5.2%			2.0%
Total		Count	42	981	77	69	22	1191
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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Table 20: Willingness to Recommend York to Others by Faculty

			Faculty Within York University					
			Business	Arts	FineArts	Science	Unknown	Total
Recommend York to Others	Yes	Count	39	829	68	62	14	1010
		%	92.9%	88.2%	86.6%	91.2%	73.7%	88.2%
	No	Count	3	111	10	6	5	135
		%	7.1%	11.8%	13.2%	8.8%	26.3%	11.8%
Total		Count	42	940	78	68	19	1145
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 21: Willingness to Take Same Subject Again by Faculty

			Faculty Within York University					
			Business	Arts	FineArts	Science	Unknown	Total
Do Again Same Subject?	Yes	Count	30	530	48	45	6	659
		%	75.0%	55.2%	67.6%	66.2%	28.6%	56.8%
	No	Count	10	431	23	23	15	502
		%	25.0%	44.8%	32.4%	33.8%	71.4%	43.2%
Total		Count	40	961	71	68	21	1161
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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unlikely that they will be laid off in the next year as compared to only 60.5% of Fine Arts students. While Arts students (64.9%) are similar to those from Fine Arts, graduates from Science fare better (70.3% feel that layoff is very unlikely) than Fine Arts or Arts students.

Information on sex and threat of layoff can be found in Table 17. Sex-based differences in the table are small and not statistically significant. Although conditions for chi-square are not met, the figures in Table 18 suggest that particularly Black graduates may be relatively insecure in their jobs. While overall only 12.6% of graduates feel that it is somewhat or very likely that in the next year they would be laid off, 21.4% of Black students believe that layoff is a possibility.

Conclusion

Two years after graduation the number of students with jobs is comparable to the national average as determined by Statistics Canada for roughly the same time period. Moreover, although graduates from SSB are more likely than others to report full-time employment, without knowing the reasons behind particularly Fine Arts students' decisions to be self-employed, and why some graduates choose part- over full-time employment, it is difficult to argue that getting a business degree is the best way to get into the labour market. This conclusion is supported by the finding that very few graduates of any faculty report that they are unemployed and looking for work. Also, while there are ethno-racial differences in graduates' current activities, there is no reason to assume that the job outcomes of non-white graduates are less desirable than those of graduates of European origin. Similarly, female graduates are equally likely to be engaged in various activities as their male counterparts.

Despite the fact that getting a business degree cannot be viewed as the best way to get a job, it is true that SSB graduates report the highest monthly incomes and Fine Arts graduates the lowest. Moreover, female graduates earn sightly less than males; however, the data do not support an argument that non-whites are at a disadvantage in terms of earnings.

Although there are some differences in earnings associated with faculty and sex, graduates of all faculties and of both sexes are equally satisfied with their jobs. There are, however, some ethno-racial origin based differences on this dimension with Black and Chinese origin graduates being somewhat more dissatisfied with their jobs than other students. Despite these differences, graduates of all origins are satisfied with their jobs.

In terms of the relationship between jobs and education, once again SSB graduates report the greatest, and Arts students the least, connection; however, there are no differences on this dimension that can be related to either sex or ethno-racial origin.

Independent of both faculty and sex, most graduates believe that they will not be laid off over the next year. Nonetheless, SSB graduates report the most job security. Moreover, Black graduates more than others believe that they might lose their jobs over the next twelve months.

Despite some negative findings, and some fluctuations based particularly on faculty, the general picture that emerges from the data is that two years after graduation the majority of former York students appear to be making a successful transition to the labour market. In addition, a substantial minority, particularly from Science, are continuing their education. The job success of this group will be determined in a follow-up survey planned for three years from now.

Assessments of the University Experience

Although the topic is not central to the current analysis, it is tempting to see if in retrospect graduates of faculties, like SSB, who have high rates of full-time job placement, are more likely than others to say positive things about their university experiences. Overall, the information in Table 19 (conditions for chi-square not met) shows that 28.8% and 49.3% of graduates currently in the labour force (i.e. students and those doing 'other' things were removed) were very, and somewhat satisfied respectively with their university experience. By comparison, only 2.0% and 9.9% were very, or somewhat dissatisfied. More importantly, the differences in satisfaction vary little from one faculty to the next. For example, the percentage of SSB and Fine Arts graduates who are very satisfied with their university experience, 31.0% and 31.2% respectively, are virtually identical.

The data in Table 20 focussing on graduates' willingness to recommend York to others also suggest that there is no relationship between coming from a faculty in which graduates obtain a high number of full-time jobs and having a positive impression of the university. Overall, 88.2% of graduates say that they would recommend York to others. More importantly for current purposes, there is very little variation from one faculty to the next. Chi-square for the table is not statistically significant.

Where faculty based differences are evident, is in responses to a question dealing with students' willingness to take the same major again. Overall, as seen in Table 21, 56.8% state that they would enrol in the same department were they to start over. Whereas only 55.2% of Arts graduates say that they would take the same major again, the figure for SSB graduates is 75.0%. For Fine Arts and Science the respective figures are 67.6% and 66.2% respectively. Moreover, differences are statistically significant. In essence, while in general graduates

are satisfied with their academic programs and would recommend the university to others, a large minority of Arts graduates would take a different major second time around. We do not know, however, if this major would be another Arts subject or would be in a more practical field like business.

Explaining Outcomes

As mentioned earlier, a survey conducted at the time of graduation showed that students with certain characteristics, such as coming from a high income family, were more likely than others to get full-time jobs. As at the time of the survey conducted two years after graduation most of the graduates who were not students were employed full-time or employed part-time by choice, it makes little sense to see if the same characteristics predict employment status. It is more reasonable to examine the matters discussed in the previous section, such as the amount of time it took to get a first full-time job and earnings, and see if the factors that predicted full-time jobs at the time of graduation remain important in explaining other employment related phenomena.

The factors that were of relevance in explaining who got jobs at the point of graduation have been identified earlier in this report:

- Family income
- Ethno-racial origin
- Tutorial, lab, and studio attendance
- Weekly hours of work while in school
- Helpfulness of former employees in getting a job
- Computer skills
- Final GPA

The theoretical relevance of these factors has been discussed elsewhere (Grayson, 1997a). Rather than repeat this discussion, explanation will be provided as the need arises.

Months to Get Jobs

The technique that will be used in assessing the impact of the above factors on outcomes, such as the number of months it took to get a first full-time job while holding other factors constant, is analysis of covariance. The results of seven separate analyses of covariance are aggregated in Table 22. For each analysis, in this and other tables, adjustments have been made for whether or not the graduates took additional education and faculty of enrolment.

Adjustments were made for additional education because students with this characteristic could be expected to have taken more time from their original date of graduation from York to get a full-time job than graduates who went directly into the labour force. Adjustments for faculty of enrolment were necessary to avoid the possibility of obtaining faculty effects in certain analyses. Because of time constraints, in Table 22 and other tables, with the exception of GPA, only statistically significant findings will be discussed. Comments will be made on GPA because it is the main indicator of academic achievement within the university and assumptions are often made regarding the relationship between good grades and opportunities after graduation.

As discussed earlier, of variables considered for analysis, family income was the strongest predictor of whether or not students had full-time jobs at the time of graduation. The information in Table 22 shows that once adjustments have been made for additional education and faculty, two years after graduation, students from families with incomes of $25,999 or less spent 6.35 months getting their first full-time jobs. By comparison, graduates with family incomes of $26,000 to

Table 22: Months to Get Full-Time Job Adjusted for Education and Faculty

	%	Unadjusted	Adjusted	N
Family Income ***				
LE $25,999	10	6.35	6.45	
$26,000 to $99,999	57	3.12	3.09	
GE $100,000	16	2.77	2.81	
Don't know	18	4.37	4.37	
				549
Ethno-Racial Origin				
Black	4	1.96	1.71	
South Asian	6	2.65	2.46	
Chinese	6	4.64	4.73	
Other Non-European	11	4.02	4.12	
European	73	3.58	3.58	
				572
% Tutorial, Lab, Studio Attendance				
LE 90%	35	3.67	3.75	
91% to 99%	20	3.78	3.87	
100%	45	3.40	3.29	
				455
Hours Work While in School				
LE 14	5	3.47	3.49	
15 to 20	82	2.43	2.48	
GE 21	7	2.43	2.48	
				433

Table 22 continued

	%	Unadjusted	Adjusted	N
Helpfulness Former Employer				
Not Helpful	43	3.54	3.53	
Helpful	57	2.36	2.38	
				327
Computer Skills**				
Bottom Third	30	4.57	4.65	
Middle Third	36	3.28	3.20	
Top Third	34	2.86	2.89	
				566
Final GPA				
LE 5.3	32	3.61	3.73	
5.4 to 6.4	38	3.07	2.99	
GE 6.5	29	3.95	3.91	
				556

F sig: *.05; **.01; ***.001

$99,999, and $100,000 or more, took 3.12 and 2.77 months respectively to accomplish the same objective. Graduates who did not know their family's income needed 4.37 months. Importantly, these differences are statistically significant. In essence, leaving aside the don't knows, there is a direct and substantial inverse relationship between family income and the amount of time it took to get a first job. Clearly, as with the analysis at the time of graduation, students from relatively low income families have a substantial disadvantage in terms of the amount of time it takes them to get a first full-time job.

From Table 22 it is also evident that the number of months it took to get a full-time job was related to self-assessments of computer skills made in the survey carried out at the time of graduation. While it took graduates in the bottom third 4.57 months to obtain their first full-time job, it was only 2.86 months before those in the top third obtained full-time employment. Moreover, these differences are statistically significant. In essence, coming from relatively high income families and having computer skills are characteristics of graduates who found a first full-time job rather rapidly. None of the results of other analyses presented in Table 22, including that of GPA, is statistically significant. In essence, having a high GPA has no implications for the number of months it takes to obtain an initial full-time position.

Number of Jobs

Information on the number of full-time jobs students have held since graduation is summarized in Table 23. This time, only hours worked while still in school is statistically significant. At the time of graduation students who had worked 21 or more hours were most likely to report full-time jobs. This time it seems that such individuals had slightly more full-time jobs (1.33) since graduation than graduates working 15 to 20 hours (1.25) and 14 hours or fewer (1.13). Despite this finding being statistically significant, it is difficult to interpret.

Table 23: Full-Time Jobs Since Graduation Adjusted for Further Education and Faculty

	%	Unadjusted	Adjusted	N
Family Income				
LE $25,999	11	1.31	1.30	
$26,000 to $99,999	57	1.20	1.20	
GE $100,000	14	1.34	1.32	
Don't know	19	1.15	1.14	
				1111
Ethno-Racial Origin				
Black	5	1.12	1.13	
South Asian	5	1.13	1.14	
Chinese	6	1.09	1.09	
Other Non-European	11	1.19	1.17	
European	73	1.24	1.24	
				945
% Tutorial, Lab, Studio Attendance				
LE 90%	33	1.30	1.30	
91% to 99%	21	1.15	1.15	
100%	45	1.17	1.17	
				945
Hours Work While in School**				
LE 14	32	1.13	1.12	
15 to 20	36	1.25	1.26	
GE 21	33	1.33	1.34	
				932

Table 23 continued

	%	Unadjusted	Adjusted	N
Helpfulness Former Employer				
Not Helpful	42	1.34	1.33	
Helpful	58	1.31	1.31	
				595
Computer Skills				
Bottom Third	32	1.14	1.14	
Middle Third	38	1.20	1.20	
Top Third	30	1.26	2.26	
				1144
Final GPA				
LE 5.3	34	1.21	1.22	
5.4 to 6.4	37	1.17	1.17	
GE 6.5	28	1.23	1.22	
				1130

F sig: *.05; **.01; ***.001

Table 24: Current Income Adjusted for Further Education and Faculty

	%	Unadjusted	Adjusted	N
Family Income ***				
LE $25,999	11	4.50	4.50	
$26,000 to $99,999	58	5.05	5.05	
GE $100,000	14	5.55	5.56	
Don't know	16	4.97	4.97	
				957
Ethno-Racial Origin				
Black	5	4.88	4.87	
South Asian	6	5.83	5.68	
Chinese	6	5.07	4.87	
Other Non-European	10	5.03	5.09	
European	73	4.98	4.99	
				980
% Tutorial, Lab, Studio Attendance*				
LE 90%	34	5.23	5.21	
91% to 99%	21	4.86	4.85	
100%	45	4.83	4.85	
				806
Hours Work While in School*				
LE 14	31	4.91	4.82	
15 to 20	36	5.04	5.07	
GE 21	33	5.22	5.27	
				801

Table 24 continued

	%	Unadjusted	Adjusted	N
Helpfulness Former Employer				
Not Helpful	67	5.01	5.02	
Helpful	33	5.19	5.17	
				511
Computer Skills***				
Bottom Third	30	4.53	4.58	
Middle Third	39	4.97	4.99	
Top Third	30	5.67	5.59	
				566
Final GPA				
LE 5.3	33	5.01	5.04	
5.4 to 6.4	38	4.89	4.90	
GE 6.5	28	5.25	5.19	
				962

F sig: *.05; **.01; ***.001

Current Income

The analyses summarized in Table 24 show several statistically significant relationships between current income[1] and variables found to be important in predicting having or not having a full-time job upon graduation. Table data show that the lower the family income, the lower the monthly income of the graduate. For example, students from families with incomes of $25,999 or less report earnings of 4.50 (approximately $3,250 per month) while those whose families have incomes of $100,000 or more have earnings of 5.55 (about $3,725). In essence, two years after graduation, students from families with high incomes have an advantage in the number of months taken to get a full-time job and monthly earnings.

Graduates who attended 90% or fewer of their tutorials etc., while in school also earn more (5.23) than students who went to 91% to 99% (4.86) and 100% (4.83) of their tutorials, labs, and studios. The likely interpretation that can be given to these findings is that those attending few of their tutorials etc., likely were working part-time and this status gave them an advantage in terms of later earnings (possibly from the same employer).

A similar interpretation may be offered for the finding that earnings vary in a statistically significant way with hours of work while in school. Graduates who reported working 21 or more hours in the first survey have the highest monthly incomes (5.22) while graduates from the lowest income group have the lowest monthly incomes (4.91). Likely the experience gained from working many hours while in school translated into the acquisition of skill and/or seniority that resulted in relatively high incomes upon graduation.

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[1]LT $500=1, $1,001 to $1,500=2, $1,501 to $2,000=3, $2,001 to $2,500=4, $2,501 to $3,000=5, $3,001 to $3,500=6, $3,501 to $4,000=7, $GE $4,001=8.

Table data also indicate a relationship between having generic computer skills and monthly income. Graduates whose first survey self-assessments of their skills placed them in the top third of graduates have earnings of 5.67 while the earnings of the lower third are only 4.53. The middle skill category averages incomes of 4.89 per month.

As in previous analyses, the effect of GPA is not statistically significant. In other words, having good grades does not translate into high incomes for graduates.

Job Satisfaction

Satisfaction with jobs was measured on a five point scale where 1 meant very satisfied and 5 very dissatisfied. As seen from Table 25, there is a statistically significant relationship between family income and job satisfaction, with graduates from high income families being more satisfied than those from low income backgrounds. While the satisfaction score of graduates in the highest family income group is 1.87, it is a slightly lower 2.23 (remember the inverse order) for graduates from low income families.

Statistically significant variations are also evident for different ethno-racial groups. The least job satisfaction (2.44) is expressed by Blacks and the most by graduates of South Asian origin. Graduates of European descent are second in terms of job satisfaction (2.00). The scores for students of other non-European and Chinese origins are 2.21 and 2.36 respectively.

Table data also show that job satisfaction varies with self-assessed computer skills. Graduates who scored in the bottom third (2.21) on this dimension are slightly less satisfied with their jobs than graduates in the middle (2.06) and top (1.90) thirds.

Table 25: Job Satisfaction Adjusted for Further Education and Faculty

	%	Unadjusted	Adjusted	N
Family Income *				
LE $25,999	11	2.23	2.23	
$26,000 to $99,999	57	2.04	2.04	
GE $100,000	14	1.87	1.87	
Don't know	19	2.23	2.23	
				1066
Ethno-Racial Origin**				
Black	5	2.44	2.44	
South Asian	5	1.96	1.99	
Chinese	5	2.36	2.39	
Other Non-European	10	2.21	2.18	
European	74	2.00	2.00	
				1102
% Tutorial, Lab, Studio Attendance				
LE 90%	33	2.09	2.08	
91% to 99%	21	2.15	2.81	
100%	46	2.02	2.03	
				905
Hours Work While in School*				
LE 14	32	1.97	2.00	
15 to 20	36	2.11	2.12	
GE 21	32	2.02	2.00	
				895

Table 25 continued

	%	Unadjusted	Adjusted	N
Helpfulness Former Employer				
Not Helpful	42	2.19	2.20	
Helpful	58	2.04	2.03	
				579
Computer Skills*				
Bottom Third	31	2.21	2.18	
Middle Third	38	2.06	2.06	
Top Third	30	1.90	1.93	
				1095
Final GPA*				
LE 5.3	33	2.17	2.16	
5.4 to 6.4	37	2.12	2.12	
GE 6.5	29	1.88	1.90	
				1084

F sig: *.05; **.01; ***.001

Finally, graduates with a GPA of 6.5 or more (1.88) are more likely than those with a GPA of 5.4 to 6.4 (2.12) or a GPA of 5.3 or less (2.17) to be satisfied with their jobs. These figures may indicate that students with high GPAs find more meaningful work than others or that they can make more out of the opportunities available to them than others.

Relationship of Jobs to Education

The relationship between graduates' jobs and their education is outlined in Table 26. A score of 1 indicates that jobs are very unrelated to the graduate's education while scores of 2 and 3 mean that jobs are somewhat and very related to education. Table data show that graduates who in the first survey reported attending 100% of their tutorials, labs, and studios (1.96) were slightly more likely than those attending 91% to 99% (1.67) and 90% or less (1.79) of their tutorials etc. to see a relationship between their jobs and education. This statistically significant finding may indicate that serious students are more likely than others to see connections between their jobs and occupational activities.

Information in Table 26 also shows that graduates who in the first survey stated that a former employer had been helpful in finding a job (1.98) saw more relation between their jobs and education than graduates receiving no help from this source (1.82). Although this difference is slight, it is statistically significant.

Similar slight, yet statistically significant, differences are seen for computer skills. Graduates in the top third on this dimension (1.99) see more relationship between their jobs and their education that the middle (1.88) and bottom thirds (1.71). Findings such as these suggest that computer skills that may have been acquired through formal education are of benefit in workplaces.

Table 26: Relation of Education to Job Adjusted for Further Education and Faculty

	%	Unadjusted	Adjusted	N
Family Income				
LE $25,999	11	1.93	1.93	
$26,000 to $99,999	57	5.15	1.88	
GE $100,000	14	1.80	1.78	
Don't know	16	1.77	1.78	
				1071
Ethno-Racial Origin				
Black	5	1.91	1.93	
South Asian	6	1.81	1.75	
Chinese	6	1.78	1.70	
Other Non-European	10	1.73	1.76	
European	73	1.78	1.87	
				1107
% Tutorial, Lab, Studio Attendance***				
LE 90%	33	1.79	1.80	
91% to 99%	21	1.67	1.69	
100%	45	1.96	1.94	
				909
Hours Work While in School				
LE 14	32	2.00	1.93	
15 to 20	36	1.81	1.81	
GE 21	32	1.72	1.78	
				900

Table 26 continued

	%	Unadjusted	Adjusted	N
Helpfulness Former Employer*				
Not Helpful	42	1.82	1.81	
Helpful	58	1.98	1.98	
				579
Computer Skills*				
Bottom Third	31	1.71	1.77	
Middle Third	39	1.88	1.89	
Top Third	30	1.99	1.92	
				1100
Final GPA***				
LE 5.3		1.69	1.68	
5.4 to 6.4		1.86	1.86	
GE 6.5		2.15	2.09	
				1088

F sig: *.05; **.01; ***.001

While for some analyses differences based on GPA were not statistically significant, in Table 26 there is a statistically significant and fairly large difference in the relationship of jobs to education between graduates with the highest (2.15) and lowest (1.59) GPAs. While it was formerly shown that GPA is of no consequence in terms of factors such as the length of time taken to get a job or monthly income, GPA does affect job satisfaction and graduates with high GPAs are more likely to be doing something related to their education than graduates with low GPAs. In essence, work may be a more meaningful experience for high GPA than low GPA students.

Likelihood of Layoff

The likelihood of layoff was measured by asking graduates how likely they thought it was that they would lose their jobs in the next year. On a five point scale, 1 meant very unlikely and 5 very likely. Information on the likelihood of layoff is summarized in Table 27.

The table shows a statistically significant relationship between ethno-racial origin and likelihood of layoff. Black graduates (2.15) are the most likely to fear layoff in the next year. Graduates of Chinese (1.44) and South Asian (1.47) origins are the least likely to believe that they will lose their jobs. Students of European (1.71) and other non-European origin fall between these extremes.

A slight yet statistically significant relationship also exists between GPA and the perceived likelihood of layoff. Graduates with high GPAs are least likely to feel that they will experience job loss (1.82) while those with low grades are most inclined (1.56) to think that they could lose their jobs. It may be that high GPA students are regarded as slightly more of an asset by employers than graduates with low grades.

Table 27: Likelihood of Layoff Adjusted for Further Education and Faculty

	%	Unadjusted	Adjusted	N
Family Income				
LE $25,999	11	1.75	1.76	
$26,000 to $99,999	57	1.65	1.65	
GE $100,000	14	1.54	1.54	
Don't know	19	1.83	1.83	
				1067
Ethno-Racial Origin*				
Black	5	2.15	2.14	
South Asian	5	1.47	1.48	
Chinese	5	1.44	1.47	
Other Non-European	10	1.59	1.59	
European	74	1.71	1.70	
				1103
% Tutorial, Lab, Studio Attendance				
LE 90%	33	1.63	1.63	
91% to 99%	21	1.66	1.66	
100%	45	1.73	1.72	
				906
Hours Work While in School				
LE 14	32	1.78	1.78	
15 to 20	36	1.60	1.60	
GE 21	32	1.61	1.61	
				896

Table 27 continued

	%	Unadjusted	Adjusted	N
Helpfulness Former Employer				
Not Helpful	67	1.66	1.66	
Helpful	33	1.60	1.60	
				579
Computer Skills				
Bottom Third	31	1.75	1.74	
Middle Third	39	1.67	1.67	
Top Third	30	1.62	1.63	
				1096
Final GPA*				
LE 5.3	34	1.56	1.56	
5.4 to 6.4	37	1.71	1.70	
GE 6.5	29	1.82	1.81	
				1084

F sig: *.05; **.01; ***.001

Conclusion

In the preceding analyses, the facts that the number of months it took to get a first full-time job, monthly incomes, and job satisfaction were directly related to family income at the time of graduation is best explained by labour market segmentation theory. In essence, coming from a relatively high as compared to low family income background gave graduates advantages in the labour market. The perception of Black graduates that they face a greater threat of layoff than other graduates can be explained in the same way. There is no way of knowing, however, whether or not this perception is accurate.

Other findings are better explained by socialization theory. The facts that students with relatively high computer skills had an advantage in terms of the amount of time it took to get first full-time jobs, that they had higher monthly incomes, higher job satisfaction, and perceived a relatively close relationship between their jobs and education, can be explained by the possibility that such graduates acquired skills in the university that were valued by employers. The findings that relatively high GPAs translated into higher job satisfaction, a close relation between jobs and education, and relatively high feelings of job security, can be explained in terms of the expertise developed by graduates during their university education.

Socialization (not necessarily socialization theory) also helps explain other findings of the study. The fact that graduates who had the most part-time work also had the highest monthly earnings can be attributed to the possibility that while working students developed skills valued by future employers, or made important contacts. Similarly, the observation that students who found former employers helpful were more likely to see a relationship between their jobs and education can be attributed to the possibility that in former jobs and interactions

with employers they developed ideas of what employers want and selected some of their courses accordingly.

Conclusion

From the information presented in this report, it is possible to conclude that two years after graduation York students from the faculties of Arts, Fine Arts, Pure and Applied Science, and the Schulich School of Business are making a fairly successful transition to the labour market. Most are employed full-time, self-employed, or employed part-time by choice. Only a small minority are unemployed or working part-time by necessity. Moreover, while there are some differences that can be related to sex or ethno-racial origin, they are minor.

Despite these findings, as in the study carried out at the time of graduation, various labour force outcomes, such as the amount of time it took to obtain a full-time job and monthly earnings, are associated with family income. This finding gives some credence to the postulates of labour market segmentation theory. By comparison, other findings, such as the connection between GPA and believing that one's job is connected to education, are consistent with the assumptions of socialization theory. In essence, while graduates enter a stratified universe in which characteristics unrelated to their education affect their opportunities, success in school nonetheless has some positive implications.

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